

JellyFish® Filter & LittaTrap™

Kingsley & Gasson Corner Development



An innovative solution was required to treat 1150m² of impervious catchment in a commercial carpark development, a site with a low 229mm driving head.

Stormwater360's answer was to install the JellyFish® Filter - a compact underground filtration device coupled with LittaTraps™ to be used as pre-treatment. The Jellyfish® Filter is our latest filtration treatment device and was acquired by Stormwater360 because of its ability to operate between 150mm – 457mm of driving head. An effective and innovative stormwater treatment device, the JellyFish® Filter is a membrane filter housed in unique filtration cartridges. Each 69cm cartridge has 11 membrane “tentacles” with over 35m² surface area; this high surface area enables the filter to achieve high flow rates at low driving head. These tentacles filter and remove a high level and a wide variety of stormwater pollutants bigger than 2 microns. The pollutants of concern on this site were TSS, Hydrocarbons and Heavy Metals. To maintain the cartridges, they can simply be rinsed and replaced, reusing the cartridge tentacles. Restrictions on this site meant that the unit needed to be online, and the Jellyfish® was fitted with an internal bypass for flows greater than the treatment flow.

As part of a treatment train solution, two LittaTraps™ were installed in catch pits upstream of the JellyFish® for pre-treatment. By fitting these upstream, floatables and the neutrally buoyant material are captured, preventing potential loss in storm events larger than the JellyFish® design.

The LittaTrap™ is a very low-cost pre-treatment device that can be hand-maintained. This makes maintenance simple and easy, which can extend the maintenance frequency of the JellyFish® Filter.

MAINTENANCE:

There is an initial inspection scheduled 12 months after installation to ascertain the maintenance frequency of the system.

"We create our products, services and processes in an environmentally friendly manner. Wherever we operate, we meet environmental requirements and make responsible use of all resources at our disposal. For us, as manufacturers of cleaning equipment, that primarily means contributing to a cleaner environment. Not only through the economical use of resources such as raw materials, energy and water but also through ambitious cleaning projects related to our shared cultural heritage. Our idea of creating a liveable society also includes helping people. Preserving values is at the centre of our action. Nature, culture and society are important values for us, the preservation of which we advocate and take on responsibility for. Through the "Clean Water for the World" initiative, the Global Nature Fund and Kärcher have pledged their commitment to improving water quality in emerging and developing nations" - Kärcher.

